41
38. (New) The recombinant adenoviral vector according to Claim 37, wherein said antibody is selected from the group consisting of a native antibody, a chimeric antibody, an antibody fragment and a bispecific antibody.

42
39. (New) The recombinant adenoviral vector according to Claim 37, wherein said antibody may be modified by a toxic substance selected from a ribonuclease, ricin, diphtheria toxin, cholera toxin, herpes simplex virus thymidine kinase, cytosine deaminase from Escherichia coli or from a yeast of the genus Saccharomyces, exotoxin from Pseudomonas and human angiogenin or an analog of the said substances.

43
40. (New) The recombinant adenoviral vector according to Claim 37, wherein said antibody is modified by an immunopotentiating substance.

44
41. (New) A recombinant adenoviral vector comprising an exogenous nucleotide sequence encoding all or part of one or more protein(s) of interest capable of forming a multimer, such as a dimer or a tetramer, in a host cell; said exogenous nucleotide sequence being placed under the control of the elements necessary for its expression, said vector being derived from an adenovirus of human, canine, avian, bovine, murine, ovine, porcine or simian origin or a hybrid comprising adenoviral genome fragments of different origins.

45
~~42~~. (New) The recombinant adenoviral vector according to Claim 37, derived from an adenovirus of human, canine, avian, bovine, murine, ovine, porcine or simian origin or from a hybrid comprising adenoviral genome fragments of different origins.

46
~~43~~. (New) The recombinant adenoviral vector according to Claim 37, wherein it is defective for replication.

47
~~44~~. (New) The recombinant adenoviral vector according to Claim 43, wherein it lacks at least all or part of the E1 region and, optionally, all or part of the E3 region.

48
~~45~~. (New) The recombinant adenoviral vector according to Claim 43, comprising an exogenous nucleotide sequence encoding the heavy chain of the 2F5 antibody, an IRES element and the light chain of the 2F5 antibody; said exogenous nucleotide sequence being placed under the control of elements necessary for its expression.

49
~~46~~. (New) The recombinant adenoviral vector according to Claim 43, comprising an exogenous nucleotide sequence encoding the signal sequence and the extracellular I and II domains of the CD4 protein operably fused to the constant γ3 region (hinge region-CH2 and CH3) of the heavy chain of the 2F5 antibody.

50
~~47~~. (New) The recombinant adenoviral vector according to Claim 43, comprising an exogenous nucleotide sequence encoding the signal sequence and the extracellular I and II domains of the CD4 protein operably fused to the constant γ3 region (hinge region-CH2 and CH3) of the heavy chain of the 2F5 antibody and operably fused to the mature human angiogenin.

51
~~48~~. (New) The recombinant adenoviral vector according to Claim 37, wherein the elements necessary for the expression comprise a promoter selected from the group consisting of the adenoviral early promoter E1A, the late promoter MLP (Major Late Promoter), the murine or human PGK (Phosphoglycerate kinase) promoter, the SV40 virus early promoter, the RSV (Rous Sarcoma virus) virus promoter, a promoter which is specifically active in tumor cells and a promoter which is specifically active in the infected cells.

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52
~~49~~. (New) An infectious viral particle comprising a recombinant adenoviral vector according to Claim 37.

53
~~50~~. (New) A eukaryotic host cell comprising a recombinant adenoviral vector according to Claim 37.

54
~~51~~. (New) A pharmaceutical composition comprising a recombinant adenoviral vector according to Claim 37, in association with a pharmaceutically acceptable carrier.

55
~~52~~. (New) The pharmaceutical composition according to Claim 51, comprising 10^4 to 10^{14} pfu.

56
~~53~~. (New) The pharmaceutical composition according to Claim 51, wherein it is in injectable form.

57
~~54~~. (New) The recombinant adenoviral vector according to Claim 41, wherein it is defective for replication.

B' Cont
58
~~55~~. (New) The recombinant adenoviral vector according to Claim 41, wherein the elements necessary for the expression comprise a promoter selected from the group consisting of the adenoviral early promoter E1A, the late promoter MLP (Major Late Promoter), the murine or human PGK (Phosphoglycerate kinase) promoter, the SV40 virus early promoter, the RSV (Rous Sarcoma virus) virus promoter, a promoter which is specifically active in tumor cells and a promoter which is specifically active in the infected cells.